DOCUMENT RESUME

ED 022 477 JC 680 356

By-Bullard, Richard F., Ed.

1967-1968 PROJECT REPORTS BY FACULTY MEMBERS OF SAN JOAQUIN DELTA COLLEGE: A PROJECT UNDER TITLE III, HIGHER EDUCATION ACT OF 1965.

San Joaquin Delta Coll., Stockton, Calif.

Pub Date 68

Note-72p.

EDRS Price MF-$0.50 HC-$2.96

Descriptors-*CURRICULUM DEVELOPMENT, EDUCATIONAL INNOVATION, *EXPERIMENTAL PROGRAMS, INNOVATION, *INSTRUCTIONAL INNOVATION, *JUNIOR COLLEGES

Identifiers-*California

These 17 curriculum studies by faculty members of San Joaquin Delta Junior College were funded under Title III of The Higher Education Act of 1965. They were intended to help initiate new courses, improve existing ones, or plan for future ones. Each project report gave its objective(s), the general methods for its development and completion, the results or findings, an evaluation, the conclusions, and recommendations. Topics, courses, and techniques covered by the project were (1) diesel technician training, (2) marriage and family, (3) childhood and society, (4) audio and TV teaching aids in basic speech, (5) special studies in social science, (6) lecture and seminar instruction in history, (7) beginning speech, (8) nursery school, (9) a tutorial program for the disadvantaged, (10) microwave theory and measurement, (11) an English program, (12) arithmetic review, (13) technical and vocational certificate programs, (14) learning aids in chemistry, (15) the community as a social laboratory, (16) business certificate programs, and (17) a problem approach to political science. (HH)

48

CURRICULUM STUDIES

A Report Under

HIGHER EDUCATION ACT, 1965
TITLE III

ED022477

By:

SAN JOAQUIN DELTA JUNIOR COLLEGE

Stockton, California

1968

TC 980 236

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

1967-1968

PROJECT REPORTS

by

Faculty Members

of

SAN JOAQUIN DELTA COLLEGE

A Project Under

TITLE III, HIGHER EDUCATION ACT OF 1965

The documents contained in this booklet constitute the final reports made by members of the faculty of San Joaquin Delta College on projects completed with release time provided by Title III of the Higher Education Act of 1965. Listed by title, are the projects contained herein, as well as the authors and their major teaching field

Edited by:
Richard F. Bullard
Research Assistant

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 31 1968

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

JC 680356

FOREWORD

San Joaquin Delta Junior College was the first public institution in California to secure funds under Title III of The Higher Education Act of 1965 for the school year, 1966-67. The Delta project was funded for a second year in 1967-68, and the attached reports reflect the scope of teacher participation as a result of this project.

Federal funds in the amount of $29,000.00 has been used in the school year 1967-68 to compensate for faculty released time, travel, and inservice training expenses in various curriculum studies. This phase of the project was completed by the employment of four (4) National Teaching Fellows.

An additional $18,545.00 has been used for administration improvements. In this area we have expanded our staff to include a full time research position, a partial increase in staff for a better scholarship and loan program for our students, and for additional administrative personnel in the area of teacher evaluation and inservice training.

The value to our college of these many programs has been very evident, and has resulted in some immediate changes, plus providing data for future decision making.

Unfortunately, Delta College does not qualify for a continuation of this project since most of the Title III funds are now being directed to smaller southern institutions under the concept of special aid to "struggling institutions."

While we have greatly profited by this program, it is now incumbent upon us to maintain a continuing locally financed program that will enable us to keep our curriculum at the highest peak of efficiency as dictated by the needs of our transfer students, as well as the expanding needs of our vocational-technical and related student needs.

This program was originated, operated, and evaluated in our college through the efforts of many individuals, including faculty, administrators, classified, and Board members. To all of them a vote of thanks and appreciation for a job "well done".

J. L. Blanchard
Assistant Superintendent-Vice President

6/27/68

TABLE OF CONTENTS

Author	Title	Page
Jim Beardsley (Agriculture)	"Diesel Technician"	2
H. E. Brimberry (Social Science)	"Action Research on Marriage and Family Courses at Delta College"	5
Leon Bush (Sociology)	"Development of Childhood and Society Course"	10
Harold F. Clark (Speech)	"Investigation of the Use of Certain Audio and Television Equipment as an Aid in Teaching Basic Speech"	14
Leonard Corren (Political Science)	"Special Study Curriculum: Emphasis on the Social Sciences"	19
William E. Dofflemyer (History)	"Pilot Study of History 17B for Lecture-Seminar Approach"	24
John M. Fanucchi (Speech)	"The Improvement of the Beginning Speech Course"	30
Alice Harris (Home Economics)	"Innovation Study in Nursery School Program"	36
Ronald Murdoff (Psychology)	"Development of a Tutorial Program and Services to the Disadvantaged"	39
James E. Oliver (Physics)	"Microwave Theory and/or Measuring Techniques"	44
R. F. Pike & Malen Stroh (English)	"Delta's English Program: A Comparative Study"	48
Elizabeth A. Prescott (Engineering-Mathematics)	"Development of Curriculum for the Teaching of Review of Arithmetic - Math 72"	62

Lawrence E. Schneider (Carpentry)	"Certificate Programs in Technical and Vocational Education"	66
Harry Schutz & Anthony Trujillo (Chemistry)	"Preparation of Single Concept Learning Aids for Use in Chemistry 1A"	70
James Smyth & Leon Bush (Sociology)	"Community Laboratory"	74
W. W. Steyer (Business)	"Certificate Programs in Business"	78
John Walker (Political Science)	"A Problem Approach to Political Science 70A"	81

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: April 20, 1968

From: Jim Beardsley

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Diesel Technician

The following report should be limited to approximately 1,000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To obtain training and experience in the testing of diesel fuel, injector pumps and related equipment used on farm machinery.

2. To design a four-hour course in training of diesel pump tests and calibrators.

Describe the general method used in the development and completion of the project.

Two mornings each week during Spring, 1968, semester, I worked beside International Harvester diesel technician at I. H. Tractor Service Agency in Stockton. I dismantled and cleaned and tested various types of injectors for I. H. tractors; I also dismantled and replaced worn parts and reassembled pumps.

I performed fuel calibration tests on Roose Master, American Bosch and International diesel fuel pumps; the three common pumps used on 80% of tractors sold today. I did work under supervision first, then alone. I set pumps to factory specified tolerances and made adjustments using dial indicator, micrometers and other special pump and injector tools, read and interpreted service manuals relating to pumps and injectors, made up parts list orders, and occasionally participated in field maintenance with the diesel service mechanic.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

1. Determined this is a very technical area.

2. Found the cost of establishing a test shop is expensive ($4, 000. 00-$6, 000. 00).

3. Enhanced personal knowledge of the subject studied, particularly in depth.

4. Found support for assuming there is need for training of personnel in this field. There are only two diesel service centers in Stockton area and there are eight agencies which sell and service Caterpillar, International Harvester, Deere Case, Ford, Allis Chalmers, Oliver tractors plus several independent shops.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

Objectives were achieved by:

1. Tape recorded (at end of day) new information learned during previous study period.

2. Took notes on some aspects of the detailed parts of training.

3. Made a testing equipment list.

4. Designed a diesel fuel injector pump testing room.

5. Became acquainted with the three types of equipment on the market.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

Will use technical information gained here to augment diesel units in both Farm Power 84 and Tractor Maintenance 83 courses.

Intend to introduce a semester course on diesel pumps and injectors, providing decision is made to purchase equipment with which to teach this.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: January 30, 1968

From: E. H. Brimberry

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Action Research on Marriage and Family Courses at Delta College

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To study general relationships between class size and instructor effectiveness.

2. To study specifically the problem of class size with relation to Marriage and Family courses.

3. To study, in depth, present methods of teaching Marriage and Family courses at S. J. D. C., as well as the students who take such courses.

4. As a result of the above research, to formulate any needed changes in teaching methods and/or modes of operation for the above courses.

5. To develop a total curriculum for Marriage and Family courses aimed at the students studied and their needs, and implement this curriculum at Delta College.

Describe the general method used in the development and completion of the project:

Basic to the study was an extensive perusal of the literature concerned with research on class size in colleges and universities. In addition, specific research in marital education in colleges and universities was studied to gain knowledge of the effect of class size on instruction in this field in particular. Finally, interviews with other educators were made regarding class size.

The students taking marital education courses at Delta College were also the objects of study. Eight hundred and thirty-eight marriage and family students taught by the writer over a two-year period ending with the fall semester, 1967, were used to obtain information. The class sizes have varied from 36 to 119 with the majority of the classes over 50 members. It is important to know who these students are, where they came from, how they are made up from a psychological and social standpoint. In gathering needed information, the following methods of research were used:

1. The California Psychological Inventory was administered to each student.

2. To determine the social background of the students they were asked on a questionnaire, questions which were of a personal nature, the forms being handed in without names.

3. To determine knowledge of sex and marriage, the Sex Knowledge Inventory published by Family Life Publications was given. Also, Reiss's inventory was administered to the students to obtain a measure of attitudes toward premarital intercourse, a great concern to most students.

4. Each student was required to write a chronicle of events in his life which will eventually lead him to marriage and a family. A system was devised to permit anonymity.

5. A natural result of marriage and family teaching is that it leads into personal marital counseling. Since the writer is a licensed California marriage and family counselor, this work is emphasized in his case. The information received is to be protected, but it is a source of information which is continually improving the course.

6. Two semesters ago the writer had three marriage and family courses of 75, 46, and 28 students. The different sizes allowed for valid research on student feelings about large classes, as well as a way to measure the amount of discussion and its quality in various sized classes.

7. Finally, in each class the students were asked to give their reactions to the class in which they were taught. The obviously "A" students were given time from the class to prepare a checking device.

<u>What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?</u>

The confusion on class size from the research literature is obvious. To sum it up, research from 1920-28 indicated that larger classes are more

effective. Research since 1957 has tended to favor the smaller classes in retention of information and problemsolving; however, the results are not really statistically positive. Given the present situation, it seems best to move to creative methods of teaching that might encompass the best of small and large classes.

There is little information research related to class size in marriage and family classes. The attitude of marriage and family teachers can be summarized quickly by stating that most would prefer small classes.

In the Delta College marriage and family student, we have a less emotionally mature student. His CPI achievement and intellectual efficiency scores are low in too many instances because of his emotional makeup as shown in the balance of the test scales. Usually the student and his family varied from lower-middle to middle class.

The results of the Sex Knowledge Inventory showed that the sex knowledge held by students upon entering the class is very inadequate. Parents, schools and peer groups are not teaching sex adequately as seen by the mean score of 49.

The questionnaire on pre-marital intercourse showed that the students are more conservative than the general population.

The individual counseling revealed a deep need that is not met in the present curriculum, methodology, and counseling services. The recommendations below present a methodology and content to deal with this concern.

Finally, student reactions indicated an almost universal feeling that larger classes should not be held in this field.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

Basic outcomes of the study have included all of the original objectives stated at the beginning of this report. An exhaustive study has been made of the relation of class size to teaching effectiveness, both in general, and in relation to Marriage and Family courses. Student populations taking these courses have been studied extensively, and on the basis of the outcomes of this study, recommendations are made below about how to proceed in the future in these courses. Finally, a basic lecture curriculum has been developed, in outline form. This curriculum sketches in detail the topics and important points to be made in a Marriage and Family course and will form the basis for future presentations of this course.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

A careful study of the present method of teaching Marriage and the Family has revealed deficiencies in the present program. These are: (1) a percentage of transfer students are capable of doing more advanced work in the field, and are not personally satisfied with the present curriculum; (2) the functional course, as it is now offered, is not always fully accepted as a transfer course by all four year colleges. To alleviate this situation, the following recommendation is made: That the College offer two courses in Marriage and the Family. The first would be a three-unit course, offered under both Sociology and Home Economics and would be functional and transfer. It would be designated Marriage and the Family. It would offer one lecture to as many students as possible in one place at a given time with the classes divided into groups of twenty-five students for one laboratory and one group counseling session. The second course would be a three-unit course offered under Sociology and would be lecture and transfer. It would be designated Sociology of the Family.

To help in other problem areas, the following recommendations seem advisable:

1. That San Joaquin Delta College employ instructor's aides in Marriage and the Family with a background in Psychology or Sociology to be used in the functional course under the direction of the instructor.

2. That San Joaquin Delta Evening School offer a six-week, one-unit course for the parents of Delta College Marriage and Family students and other interested parents.

3. That the College take into account that an instructor in Marriage and the Family spends much extra time in personal marital counseling, and that this counseling is resultant from the course content. To the end that he may be able to accomplish this work to a better degree, it is recommended that he be given a minimum of three extra units.

Condensed by: Richard F. Bullard
Research Assistant

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: March 7, 1968

From: Leon Bush

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Development of Childhood and Society Course

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To prepare the student for understanding the implications of child development in relation to nursery school, pre-school day care, and Headstart program.

2. To help the student understand the various ethnic group techniques of socialization.

3. To aid the student to grasp the stratification and the effect on the child in language and family development.

4. To prepare the student through practical readings in these fields and through sensitivity discussions.

5. To visit the various areas (nursery school, pre-school, and the Headstart program) to get the feel of the types of problems this field presents.

Describe the general method used in the development and completion of the project.

The course was centered around a three-phase development. First, curriculum articulation hinging on socialization, stratification, the family and protective services. The second was based on current reading materials,

both magazine and book, for background. The third phase was geared around visitations to pre-school, nursery school, and the Headstart program.

Small group discussions were introduced for sensitivity training and for the practical exchange of ethnic and sociological stratification. Movies were used to reinforce the major areas.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

The materials in curriculum were both general and specific in nature. General concepts were admissable but the practical discussions were based on experience. The problem of relationship became acute because of the dispersion of ethnic groupings. The black students (six girls) became highly sensitive after the death of Dr. King. Any discussion of lower economic groupings or ethnic differentation caused riotous discussions. Preparation and discussion of various groups, stratification and ethnic, seemed to be reached.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The objectives were reached, however, the inter-related problems of the theory and pragmatic became a difficult one at times because a large number had personal experiences. To enhance the class objectives minority race members related to the pre-school field should be invited to discuss with the class their particular problems.

Limitation on the readings should be arranged according to ability. Several other topics might be added for insight--race and collective behavior.

Recommendations: As a result of your conclusions, what further action should be taken in the future. Be specific.

Aside from visitations by minority and ethnic leadership to the class, certainly a great deal of thought should be given to a teacher for the course from a minority group. The course has been double numbered, both terminal and transfer, for the next spring semester. Dr. Wood, Mr. Barber and Mrs. Harris and I met for a discussion of this problem. I would like to lodge a minority report. A class of this caliber with IQ range of 1. 1 to 9. 0 stanine makes a chaotic problem under the best of circumstances. Those in the lower stanines should have shown more ability rather than just dumped into the class on a need basis. Sympathy with the problem does not create a minimal amount of efficiency. Therefore, some thought should be given to a separate terminal course.

Since the course will be three units there should certainly be an increase in visitations to the various pre-school and nursery schools - (at least 15 hours). This would inter-relate the course at its weakest point (theory vs pragmatic). The course is a training preparation for working with children - what other way!

The last recommendation is to obtain two or three soft back books as a basis for assignment. Even with an outline a large percentage of the students could not take notes, and floated due to their background.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: May 31, 1968

From: Harold F. Clark, Instructor of Speech

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Investigation of the use of certain audio and television equipment as an aid in teaching basic speech.

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To determine the feasibility and value of recording beginning speeches on a double tape deck system to permit immediate playback for the speaker.

2. To assess the value of video taping beginning speakers followed by playback for observation and analysis by the entire class.

3. To compare different makes of video equipment to determine the acceptable quality standards for the speech classroom.

Describe the general method used in the development and completion of the project.

1. The first objective required two AMPEX Model 601 tape decks. A Shure Model 545S microphone was provided for sound pickup and a pair of padded dynamic earphones, PM&E Model LT300, were provided for student listening. A switching panel was constructed to permit switching the microphone and the earphones to either of the two tape decks. The first speaker was recorded on "A" deck. The speaker then moved to the rear of the classroom where he listened to his talk

by earphones while the second speaker was recorded on "B" deck, and thus the process continued. Near the end of the class period the last speaker listened while the instructor made concluding remarks to the class. This system was used for one complete round of talks in each of four class sections. After listening to his individual talk, the speaker wrote a short comment on his performance.

2. The second objective was explored by using county owned video equipment which was available to the college. The equipment consisted of an AMPEX Model cc 324 Video Camera with a Cannon C-16 zoom lens, an AMPEX Model 7500 series video tape recorder, and a SETCHELL-CARLSON 21" monitor. The equipment was set up in the speech classroom and each class member was permitted a brief impromptu period in front of the camera for familiarization. These appearances were video taped and then shown on the monitor. No critiques or grades were given for the impromptu appearance. This was followed by a complete round of prepared talks which were recorded during the first half of each class period and were then seen and heard on the monitor during the second half. During the playback session each student filled out an evaluation form on all speakers.

3. The comparison of equipment phase was less successful because it was extremely difficult to obtain other makes of video equipment from dealers willing to leave it long enough for a realistic test. Late in the semester it was possible to obtain a SONY EV-200 video tape recorder and a CRAIG 6401 video camera with the same type zoom lens used with the AMPEX camera. It was possible to conduct most of a round of speeches under the same conditions, approximately, as were used in the earlier phase. While the primary objective at this time was the evaluation of equipment, it was also possible to observe student reaction to a second appearance before the video camera within a two month period.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

1. The double deck audio was found to aid the class members in speech development by (a) permitting an immediate opportunity to listen to the speech, (b) permitting the speaker to actually hear instances of poor articulation, (c) to appraise the student of these errors without embarrassment. There was also the advantage for the instructor that individual speech criticism time was saved. There were certain disadvantages. The time saving mentioned above was lost if the talks varied in length

which occasionally caused delay in freeing the respective tape deck for the next speaker. The instructor was required to pay some attention to the technical aspects of recording also, the last speaker missed the concluding remarks since he was listening with earphones at this time.

2. The video tape playback in the classroom provided a very effective teaching media. In this situation the student was acutely aware of all aspects of his delivery technique. Errors in pacing, difficult to explain to a student in understandable terms, are clearly apparent. The only major objection was that twice the amount of class time for each talk was required. The operation of the video equipment by the instructor is entirely feasible.

3. The small amount of equipment tested and the short time some was available permitted a few observations but no valid conclusions. Some of the observations were as follows:

    a. The AMPEX video camera produced a superior image.
    b. The monitor which was part of the CRAIG camera provided a distinct advantage.
    c. The controls on the AMPEX video tape recorder were simple to operate and were designed for remote control.
    d. The SONY video tape recorder appeared to produce a satisfactory picture with much less attention to cleaning of the scanner head than the AMPEX.
    e. There was little price differential between the AMPEX and SONY systems. Both produced a picture quality which was entirely satisfactory.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

1. The value of using the double deck audio equipment in the beginning speech classroom was confirmed. The technique of use could be improved by training a student to operate the equipment. A suitable cabinet to house and secure the equipment is required.

2. The use of video tape equipment with the playback in the classroom is certainly justified for at least one round of talks in the beginning speech class. Such an experience is well worth the additional time required. It also provides an opportunity for each class member to prepare speech evaluations. This is productive for certain class members. During the second experience before the camera when the SONY equipment was used there was a noticeable lack of interest in the

playback by other than the speaking group. One such method, to counteract this, used by a community college, is to have separate monitoring room to which the speaker group report at the following class meeting. There the speaker group witness their performance. This does two things. It eliminates the loss of time for the entire class watching the playbacks, and maintains the interest at a high level.

3. All the equipment used in the video tests was in the higher price class of institutional television equipment. Whether or not the less expensive systems would provide an acceptable picture quality with the requisite dependability remains an unanswered question.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

1. Provide a suitable portable housing for the double deck audio tape recording equipment so that it may be properly secured when not in use, and may be moved to other classrooms when required.

2. Continue to schedule county owned video equipment for use in the beginning speech classroom until such time that we can secure similar equipment exclusively for speech class use. When space and equipment can be provided, test the alternate method of playback monitoring described in section "Evaluation" above.

3. Continue to secure various brands and types of video equipment for testing. This can be accomplished during regular speech class sessions by cooperation of the instructor and the audio-visual coordinator.

HAROLD F. CLARK
Condensed by:
Richard F. Bullard
Research Assistant

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: March 7, 1968

From: Leonard Corren

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Special Study Curriculum: Emphasis on the Social Sciences

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. The basic objective was to develop and bring into being a program of Special Study in Social Sciences. This involved:

2. Design of an application form, statement of purpose, and determination of realistic criteria for accepting students into the program.

3. Compilation of tentative outlines for suggested areas of special study, reading lists, and methods to be used by students and faculty.

4. Development of means and procedures for evaluating student accomplishments in Special Study.

5. The major assumption involved was that students at the first and second year levels should have the opportunity of engaging in programs of this type in order to enhance their total educational experience.

Describe the general method used in the development and completion of the project.

It was initially decided that a review would be made of the catalogues of the California colleges and junior colleges to ascertain which of those

institutions offered programs of Special Study. Upon obtaining this data, contracts would be established with the Dean of Instruction of each of these colleges. After discussing with these individuals their institution's Special Study program, a decision would be made as to the desirability of distributing a prepared questionnaire to those faculty, students, and administrators at the college who had been involved with the program.

At the same time that the list of the California institutions was being compiled, and the initial inquiries were being made, a thorough search of the literature was undertaken to see what possibilities existed there.

The preliminary probing led the investigator to these conclusions: limiting the research to the programs of the California colleges alone would yield a statistically insignificant number of programs for study. Further, the distance between the institutions with these programs and the difficulties of written correspondence would encompass a range of activity beyond the limits possible for the investigation.

A review of the published literature on Special Study, however, offered great possibilities. Numerous, though widely scattered, surveys and reports were available in this area. Therefore, a methodology was adopted whereby the survey would be based on applying the projected questionnaire to the literature for the gathering of the required data, rather than sending it to the various schools.

While it can only be speculative as to what direct interviews would have produced, it is suggested that the methodology actually employed produced even a greater breadth and depth of information since it drew upon such a vast range of findings and scholarly sources.

Additional facts concerning the history and present operation of the program at the different schools were obtained from catalogues and other documents. The accuracy of the information in these materials could usually be checked by a correlative procedure that was utilized. Where Special Study papers were available, they were perused in order to see what the students had written.

Finally, conferences with Division personnel at San Joaquin Delta College were held, to ascertain views and to coordinate efforts.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

Admission Practices: The most common combination involved: (1) a scholastic average of B or better; (2) approval of the faculty member under which the work is to be done; (3) certification by a department or division committee, one of the members of which is the chairman of the department or division.

Types of Special Study: The most common types of projects found are: (1) investigation, information gathering, and analysis based on library work only; (2) investigation, information gathering, and analysis involving field work; (3) tutoring and instructional responsibilities; (4) specialized seminars.

Selection of Project: This is usually done through conferences between student and faculty advisor under whom he will work. The student is given various degrees of freedom in choosing the project, however, the faculty advisor usually undertakes to offer some guidance in this regard.

Supervision of Special Study Students: This is generally accomplished by: (1) conferences between students and faculty advisors; (2) periodic written reports of progress; (3) small-group meetings; and/or (4) interim quizzes and tests, either written or oral.

Types of Final Reports and Grading: The most common requirements for finalizing the progress of a student were: (1) submission of a formal paper; (2) completion of a comprehensive examination; or (3) submission of a paper and completion of an examination.

Generally, faculty and student attitudes toward the programs were favorable. When asked what changes could be made, comments were brief, and generally involved administrative difficulties. Most students and faculty expressed satisfaction in the programs as they existed.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The methodology employed led to the achievement of the objectives of the project. An admission policy and general guidelines for Special Study programs have been devised. This includes guidelines for supervision of Special Study students, types of student final reports and grading, and the creation of a file of student papers. The position and duties of a Special Study Coordinator in charge of the programs for each department for the semester have been outlined.

The application form and statement of purpose form are completed and after surveying the members of the faculty in the History and Political

Science departments, a tentative list of topics acceptable for Special Study has been prepared.

Finally, course descriptions, catalogue entries, and other administrative arrangements have been completed for Special Study courses in History and Political Science and each of these courses was offered for the first time for credit during the 1967-68 college year.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

The general policies and guidelines developed for Special Study in the Social Science area and applied specifically to History and Political Science, certainly have value outside these areas. In the future it is hoped that such programs can be created in other applicable areas of study. The two final reports from this particular project are offered as models for other divisions at the college to draw upon.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 4, 1968

From: William E. Dofflemyer

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Pilot Study of History 17B for Lecture-Seminar Approach

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To reorganize History 17B for two lecture presentations and one seminar discussion per week.

2. To compare this approach with conventional (three lectures per week) class to determine if more learning takes place.

3. To develop transparencies for use in lecture presentations for the entire course.

4. It was assumed that students in lecture-seminar programs would have a greater opportunity to learn concepts, and would not learn less factual material due to the reduction in lecture time.

Describe the general method used in the development and completion of the project.

Two classes in History 17B were compared: One was a Pilot Group of 125 students which met for two large group lectures per week and broke down into five seminar discussions for one meeting each week. The second was a Control Group of 75 students which met for three lecture periods per week. Comparisons were made of the average stanine scores for both classes. SCAT Verbal was 6. 1 for the Control Group and 6. 2 for the Pilot Group. Coop. English total was 5. 6 for the Control Group and 5. 9

for the Pilot Group. After consultation with members of the counseling staff, the conclusion was made that the groups were of the same relative ability level and therefore comparisons between the two classes would be valid.

We gave both groups the same examinations, which were based on class presentations as well as required readings. In all three midterm exams, separate curves were established and comparisons were made. The students in both groups were given a fifty question class evaluation form toward the end of the semester in which they were given an opportunity to express their feelings about the program.

We developed the lecture-seminar course around the idea that a discussion period should follow two lecture presentations and be related to them. The lecture sequence was, therefore, Friday and Monday with the follow-up discussion coming on Tuesday, Wednesday, or Thursday. Thus a major topic or idea would be the basis for one week's work. Reading assignments were made in advance and were expected to be completed by the time of the discussions. Reading assignments in the text and elsewhere provided a basic source of information for the students. The lectures were the source of interpretation and supplementation. The discussions served as a means of understanding and application.

We attempted to vary the methods used during the seminar periods. The variety developed is suggested in the attached course outline along with lecture topics.

<u>What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?</u>

We have noted that an obvious result of the lecture-seminar approach is that we have gotten better acquainted with students. We have learned almost everyone's name; we have been able to answer their questions and address ourselves to their problems; and we have been able to feel an interaction and feed-back that seems almost impossible in conventional classes.

Another result is that student participation in discussions and involvement in the subject matter was increased. I would suggest that 20% participation in a conventional class is optimistic, whereas we have had from 65% to 86% participation in practically every seminar discussion throughout the semester.

A comparison of test results has revealed that the reduction in the amount of lecture time does not mean that students learn less. In the case of the three midterms, the means and medians of the two curves were within one to three points, and it was possible to apply the same grading scale. These results support our assumption that students in the lecture-seminar program would not learn less factual material due to the reduction in lecture time.

The class evaluation submitted to the students indicated substantial approval and enthusiasm for the lecture-seminar approach. Student responses to relative questions are noted in the appendix. On the basis of these responses, I would, therefore, conclude that the lecture-seminar approach is a positive alternative to the conventional class of less than 50 students, and is far superior to large classes without seminar break-downs.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

We have achieved, I believe, the objectives of our study by reorganizing History 17B for two lectures and one seminar discussion period per week, and by comparing this approach with a conventional (three lectures a week) approach. I feel, however, that instructors involved in the lecture-seminar or forum approach should continue to evaluate their programs and make attempts to seek student response in comparison with conventional approaches.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

1. The lecture-seminar and/or forum method should be tried in all Social Science courses where formal lectures are a necessary part of the course.

2. The lecture-seminar and/or forum method should not exceed 50% of the total enrollment in a particular course, so that the conventional alternative is also available to the student.

3. The large lecture classes (more than 50 students meeting for three lectures a week) should gradually be replaced by sections using the lecture-seminar and/or forum approach.

APPENDIX "A"

q. 38. In comparison to a class of more than 100 students, meeting for three lectures a week; I feel that the lecture-seminar approach would be:

57% said "far superior"
30% said "better"
9% said "about the same"
4% said "poor"

q. 39. In comparison to a class of about 50 students, meeting for three lectures a week, I feel that the lecture-seminar approach would be:

26% said "far superior"
38% said "better"
25% said "about the same"
10% said "poor"

q. 40. I feel that I would learn more in:

73% said "the lecture-seminar approach"
2% said "in classes of more than 100 students meeting for three lectures a week"
25% said "in classes of about 50 students, meeting for three lectures a week"

q. 41. I feel that lecture presentations are better in:

64% said "the lecture-seminar approach"
5% said "classes of more than 100 students, meeting for three lectures a week"
31% said "classes of about 50 students, meeting for three lectures a week"

q. 42. I feel that class discussion is better in:

85% said "the lecture-seminar approach"
1% said "classes of more than 100 students, meeting for three lectures a week"
14% said "classes of about 50 students, meeting for three lectures a week"

q. 44. My general reaction to the lecture-seminar approach is that it provides an educational experience that is:

44% said "excellent"
40% said "good"
13% said "fair"
3% said "poor"

q. 47. My participation in seminar discussions has been:

61% said "considerable to moderate"
33% said "little"
5% said "not at all"

q. 50. Considering the lecture-seminar approach, I recommend:

43% said "all History 17A-B sections should convert to this method"

49% said "both lecture-seminar and conventional classes should be offered in History 17A-B"

8% said "lecture-seminar approach should be discontinued"

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 4, 1968

From: John M. Fanucchi

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: The Improvement of the Beginning Speech Course

The following report should be limited to approximately 1,000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To study the nature of the Junior College Beginning Speech Course.

2. To study the departmental "frame of Reference" of the course.

3. To investigate teaching methods in the course, with special emphasis on innovations.

4. To secure copies of special instructional materials and aids used in teaching the course.

5. To gather ideas which might be utilized to strengthen the Beginning Speech Course at San Joaquin Delta College.

Describe the general method used in the development and completion of the project.

Visitation of four junior colleges: American River on 2/14/68; Diablo Valley College on 2/19/68; Modesto Junior College on 2/22/68; Chabot College on 4/1/68.

Each conference with speech instructors at the colleges was taped. Conferences lasted from one to four hours, and from one to five

instructors were interviewed. Each interview was then reviewed and evaluated, and a written index was prepared for each tape for ready reference. In each interview, an attempt was made to relate the discussion to the five objectives listed above.

The tapes, together with the handouts secured at each college, are available in Building F-4a.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

Course Philosophy

a. Differences in emphasis exists, but there is a basic similarity in objectives.

b. Some colleges offer two "tracks", with different prerequisites.

Departmental Structure

a. All the Speech Arts are in one department.

b. Departmental policies and standards are determined by staff consensus.

c. Beginning courses are taught by full-time instructors in Speech.

d. Unit-for-unit credit is given. Eighteen hours per week is considered excessive.

e. The one college to experiment with large classes (over 40) now considers large classes indefensible. No classes are planned to have more than 30.

f. Classes usually meet three days a week for an hour.

g. A Student Speaker's Bureau is a staff assignment.

h. Specialized facilities selected and/or designed by the Speech Staff are reserved for exclusive use of the Beginning Speech classes.

i. The only answer to student attrition is instructor availability to students.

j. The Forensic Program is shared by all Speech Arts instructors.

Course Methodology

a. The type, number and complexity of assigned speeches vary.

b. A number, rather than a letter, is used to grade each speech.

c. Time is allowed after each prepared speech for the class and the instructor to react.

d. The course includes out-of-class listening and speaking.

e. More use is being made of audio and video tapes.

f. The course includes a unit on Listening and/or Critical Thinking.

g. This course becomes a natural "sounding board" for student-faculty dialogue.

h. A standard evaluation sheet is used on each assignment. This is checked by the instructor and/or class.

i. The student is expected to "get up on his feet" regularly. To accomplish this, the size of the class is deliberately limited.

j. "Handout" materials are extensively used to supplement the textbook.

k. Student lectures or panels often replace the instructor-lecture method.

l. Instructors feel it is essential to "feed" students into the Forensic program.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The study was much too ambitious a project to be completed in one semester. It is our feeling that we have just "scratched the surface." We had planned to visit two other institutions but were unable to do so.

The study convinced us of the tremendous value of inter-institutional dialogue in the Speech field.

The project did reveal some specific teaching techniques worth using at Delta College.

Our investigation did identify some areas of Speech Philosophy and Methodology which need to be studied further as part of institutional self-evaluation.

We found that professional speech organizations were interested in the study, especially the Junior College Interest Group of the Western Speech Association. Members of the Northern California Forensic Association and the California Junior College Speech Association would also be interested.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

1. That Drama and Speech course offerings be combined in a Speech Department.

2. That units be assigned a member of the staff to direct the Speech program at the college.

3. That only full-time instructors of speech be assigned to teach the Beginning Speech Course.

4. That sections of Speech 1a not be assigned as a form of relief for instructors with a heavy load in other teaching areas.

5. That an in-depth study by the speech staff of the total Speech program be undertaken.

6. That facilities be developed specifically designed to strengthen the Speech program.

7. That new course offerings be explored:

    a. Radio & Television
    b. Voice and Diction
    c. Choral Reading & Reader's Theatre
    d. Group Discussion
    e. Parliamentary Procedure
    f. Student Speaker's Bureau
    g. Speech for the Foreign Born
    h. Speech and Student Leadership

8. That copies of this report be made available to the Speech Staff.

9. That the Speech staff examine the Beginning Course: objectives, assignments, methodology, class size, grading standards, teaching load, etc. Generally acceptable departmental standards must be established.

10. That additional assigned time be secured for other members of the Speech staff to allow for inter-institutional exchange of ideas.

11. That Delta College apply for funds for additional studies in this important curricular area. Reference is made to the CJCA Committee on Research and Development.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: March 7, 1968

From: Alice Harris

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Innovation Study in Nursery School Program

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. In general, to plan and expedite a two-year curriculum in early childhood education. In order to carry this out, other more specific objectives were:

2. To survey the community needs by contacting private and federally funded personnel and making these people a part of the planning.

3. To develop, from a core curriculum, a training program in the junior college.

4. To establish criteria for selecting instructors.

5. To develop a screening process for placing trainees in jobs.

Describe the general method used in the development and completion of the project:

The first step in developing this curriculum was to contact personnel working in the field of early childhood development, either through privately financed agencies, or through those financed by federal and state funds. After contacting these individuals, an advisory board was formed to act as a liaison between the college and the community, and advise the college on needed courses.

Once a core curriculum was developed from recommendations of the personnel working in early childhood development, a two-year curriculum, which could be offered by the college was constructed. In preparing the curriculum, reliance was placed on information and materials from the various agencies involved in setting up nursery school programs.

Finally, other library and bibliographic materials were gathered from the literature to provide a set of references for the projected course of study.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

As a result of the above program, an advisory committee was set up, consisting of representatives of all of the major programs for early childhood development currently operating in the vicinity. Working with this group and other agencies, the curriculum was developed, course outlines developed and printed, a syllabus of the course of study was completed, and a bibliography of books and publications compiled.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

At the present time, the original objectives of the project have all been achieved. The Advisory Board has been set up, has achieved Delta College Trustee approval, and has met and approved the curriculum. From the core of ideas obtained from the community, a complete curriculum has been developed and approved by the Board of Trustees. Some of the courses are already being offered, and all will be in the 1968-69 catalogue and offered in the future. As mentioned above, course outlines and a syllabus of courses has been developed, and the curriculum is presently operating as planned.

Condensed by: Richard F. Bullard
Research Assistant

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 6, 1968

From: Ronald Murdoff

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Development of a Tutorial Program and Services to the Disadvantaged

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. Development of a tutorial program utilizing students who are achieving to tutor those who are not.

2. Inform and encourage academically able students to take advantage of state college and university programs for the economically disavantaged.

3. Develop a proposal and recruit tutors and students for a college readiness program for the summer of 1968 at San Joaquin Delta College.

4. Develop additional financial resources to aid economically disadvantaged students.

5. Encourage a more flexible policy regarding placement scores so minority and disadvantaged students do not feel discriminated against in their attempts to get an education.

Describe the general method used in the development and completion of the project.

1. Meetings with administrative personnel resulted in a tutoring program being funded for $2, 000. 00 for 50 tutors and 50 students for the rest of the semester. The program was co-ordinated through the counselors and the Student Placement Office. The tutors were assigned to students in a specific subject matter area on a one to one basis.

2. Counselors and other personnel at the college have been informed in counselor's meetings and informally of programs at various colleges and universities as the information on educational opportunity programs has become available.

3. A proposal was developed and approved by the administration and the Board of Trustees for a College Readiness Program for 50 students and 50 tutors in connection with the Summer Session of 1968. It involved students from high school taking one college transfer course for two hours each day, and being tutored for another two hours by a paid tutor. The tutors and students were supervised by two full-time instructors and several volunteers. The students who were tutored were low achieving students who seemed to have the potential to do college level work.

4. In cooperation with the person administering the financial aids programs, additional resources have been sought from various campus and community groups to provide matching funds for Economic Opportunity Grants.

5. Several meetings of a faculty-administration committee were held which resulted in the removal of the English placement score requirement for one course and greater flexibility in the interpretation of placement scores by the counseling staff.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

1. Data from 46 or 50 tutors in the tutoring program indicates that 10 students improved their grade at least one full letter grade, three students improved two letter grades, 10 students showed no change in grade, and 15 students showed an improved attitude toward school or better study habits even though there was not a significant change in grade. Eight foreign students improved their ability to communicate in written or spoken English. Two students were unable to be evaluated by the instructor since recent tests had not been given before the data had to be collected. Eight students had potential for further improvement if they had been helped earlier in the semester. The program started in mid-semester. Six of the tutors expressed an unsolicited feeling that

they had benefited greatly from the tutoring process also.

2. The counselors have encouraged several students to apply for educational opportunity programs for the disadvantaged at colleges and universities. To date, three persons have been accepted in these programs though more expect to hear soon.

3. A College Readiness Program has been developed and funded for this summer. Results of the program will not be known until it is completed this summer. However, the development and implementation of such a program is a significant result of this released time project.

4. A total of about $1, 000. 00 in new matching money for Educational Opportunity Grants has been developed from campus organizations. Sources of such funds in the community remain largely unreached as yet.

5. A greater awareness that placement scores may not be accurate for minority and disadvantaged students has developed. This is reflected in greater flexibility in interpreting the scores and use of other data to determine the appropriate course level for the student.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

In general, the objectives of the project have been achieved since at least some things were accomplished in every area of the project. Some of these accomplishments were minimal compared to the need which exists in the area of the disadvantaged student. The project did prove that effort directed in this direction can be fruitful and it has provided a skeletal outline for an expanded program in the future. It is hoped that more adequate allowance for staff time will be given in the future to further meet the needs in this area.

The objectives of the program could have been carried out further by a person who was given more than three units of released time. However, this was all that was available at this time due to scheduling and other factors. It is suggested that at least six units or more of teachers time be assigned to any future projects in the area of the disadvantaged. The need for meetings with a variety of college personnel, and personal contact with students and student organizations, requires more time than independent research might require. Again, this was not realized when the project was initiated.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

It is recommended that:

1. A person be designated as a coordinator of the tutorial program on a full-time basis, and no less than half-time. With the large and diverse minority population of this district's service area, such a person would seem to be imperative.

2. The tutorial program for the 1968-1969 school year be expanded to as many as 100 students and 100 tutors and be financed for the entire school year.

3. More effort be expended to get more funds from community groups to match federal funds for disadvantaged students.

4. The various policies regarding qualifying placement scores for various classes continue to be evaluated in the light of the experience with the removal of such scores from one class for this next year.

5. The policies on the use of placement scores be interpreted to allow adequately for the student's family background, motivation to learn, and the availability of tutoring services to support a student in a course.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: March 7, 1968

From: James E. Oliver

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Microwave Theory and/or Measuring Techniques

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To develop and recommend a course supplement to the existing electronics offerings and/or;

2. Develop a program for exposing would-be electrical engineering majors to an important area of their work.

3. To outline a one-semester course incorporating both Microwave theory and measuring techniques.

Describe the general method used in the development and completion of the project.

Three individuals worked the exercise in the manual accompanying the equipment now held in stock by our electronics department, and have reached accord on the expected results.

This investigator also attempted to obtain those other manuals in microwave technique currently in use and attempted to make our equipment compatible to such trials as were deemed worthwhile. An attempt was to be made to investigate hardware available as surplus through military and industrial users which operate with similar wave bands.

Finally, an examination of the literature available on the subject was to be made in order to determine those references most suitable for use as aids and to instruction in the area.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

After working through the manual, the following conclusions were reached: For a course which was directed to those seeking techniques in measuring, there are too few variables in measurement to develop any skill in this area. A manual by Kellejian of San Mateo suits this purpose better; however, we would require a little more hardware to meet its demands. If microwave theory alone were the course objective, adequate results could be gotten through the working of some 15 trials to confirm the theory developed in class.

After investigating the possibilities of augmenting our present equipment, it was found that there is a fair amount of X-Brand equipment in surplus. The type of construction varied with its main function, having been radar plumbing. To incorporate some of these parts into additional measuring trials would require very little effort, providing, of course, the technician were familiar with the function of the new parts. This is apparently the stumbling block with surplus microwave hardware.

The literature falls into two classes: (1) theory; (2) measurement. In all but a few texts, the subject matter is either very theoretical on almost a graduate level in electromagnetic wave transmission, or it is of a descriptive nature dealing with the instrumentation only. The few texts spoken of are of recent publication, and do try to incorporate some theory into what generally are termed "introductory texts".

There again may be a classification in era - the immediate post-war, and the recent - by "recent", I mean the past five years during which communication lines have been relying on the microwave networks.

Evaluation: Have the objectives of the study been achieved? If so, How? If not, what could be done in the future to achieve them?

A course supplement to the existing electronics will surely now be available. I may point out that from the time of purchase of this equipment, the demands on instructor time was such that no use whatsoever was made of the equipment for some three years. It takes a matter of several weeks of concentrated reading and lab trial to become moderately familiar with the subject.

With a recent catalog change, the engineering major is now studying electricity and magnetism in the final semester of the Physics 1a, b, c, sequence, and for that reason, may be a more flexible individual as far as supplementary work is concerned. It is the intention of this department to make the equipment necessarily available.

The findings at the institutes offering this type of course are such that latitude should be allowed in the group, as well as the content, with the instructor improvising as his particular interest and abilities dictated.

May I point out a feature of this subject: the industrial climate of the area defines the type of technical training the college, in its best interests, should offer. This same industry often provides the equipment for courses aligned with its employee demands. We have in San Joaquin County no industrial users of microwave equipment, apart from the Pacific Gas and Electric in whose employ there are now but three technicians involved in microwave. We cannot expect, either, assistance in the way of equipment.

Recommendations: As a result of your conclusions, what further action should be taken in the future. Be specific.

In the future, the instructor in the area of electronics should become familiar with microwave equipment as held in stock. He should also be cognizant of the demand in the area for men with this type of training.

My opinions are that the type of student presently enrolled in the electronics course has only sufficient math to become a technician and the theory of operation would be beyond his grasp. The situation as such divides the study into two channels; one wherein the study of operation is undertaken with some mechanical trials-----requiring an Engineering major, a second wherein minimal theory is presented and the equipment used to the extent of becoming technically familiar-----the technical student.

My survey of the demand for this training and the availability of suitable candidates for a microwave course suggests that such a course be only an optional branch of either the electronics or physics courses.

Condensed by: Richard F. Bullard
Research Assistant

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 4, 1968

From: R. F. Pike and Malen Stroh, Instructors in English

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Delta's English Program: A Comparative Study

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

This study grew out of certain proposals for the improvement of Delta's English curriculum that were submitted to the Negotiating Council by the English faculty. Behind these proposals stand an assumption and an opinion that, together, constitute the raison d'etre of the study. The assumption is that our English program should be equal to--or superior to--those of comparable junior colleges. The opinion of the English faculty is that Delta's English curriculum is no longer equal to those of its neighbors.

The purpose of this study, then, is to measure Delta's English program against those eight comparable junior colleges. The comparison is organized to reveal in three ways the degree of emphasis accorded to the teaching of English: (1) by investigating the nature and goals of transfer, remedial and terminal composition courses; (2.) by measuring class sizes and the relative size of the English faculty; (3) by noting the breadth of course offerings--transfer, remedial, and terminal.

Describe the general method used in the development and completion of the project.

The method of gathering information for our comparison was simple. The authors of this study--along with Dr. Robert Dutton, whose assistance was invaluable--spent at least one-half of a school day at each of the following junior

colleges inspecting the English curriculum: Sacramento City College, American River College, San Mateo Community College, Foothill College, San Jose City College, West Valley College, Chabot College, and Modesto Junior College. Further, a special trip was taken to Sierra College especially to investigate their remedial writing and reading programs. At each of these colleges, we interviewed at length the Division Chairman, the Dean of Instruction, and key members of the English faculty. Our interviews were guided but not restricted by a planned series of areas of inquiry, a copy of which constitutes Enclosure 1 of this report.

The authors of this report took extensive notes of the responses to our questioning and collected a weighty bundle of catalogues, course outlines and other departmental policy sheets for later perusal. Obviously a great deal of hard information was thus accumulated that has since been reviewed, condensed, digested and tabulated for comparative purposes. Further, aside from the notable accumulation of facts, we all feel that we have acquired a rich fund of impressions, ideas, hints, and hunches that, though not appropriate to this report, will prove highly useful in any planning for curriculum improvement to which we become parties.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

This comparative study has, in the judgment of the authors, revealed the following:

I. -- That the nature and goals of the English 1A-1B program are on a par with other schools--with the possible exception that some other colleges offer advanced exposition beyond 1B.

-- That the nature and goals of English 73 make it substandard to the pre-1A courses elsewhere, all of which are small classes emphasizing writing.

--That the nature and goals of our English 74 as practiced are sufficiently uncertain and confused (no entrance requirement, mixed remedial-terminal enrollment, uneven emphasis on writing) to make it an inadequate substitute for the two courses that usually take its place.

II. -- That Delta consistently evidences the least emphasis on the quality of its English program--as revealed by class size, proportionate size of faculty, and breadth of offerings--of any of the schools visited (see Enclosure 2-7). This dilution means, in practice, that the student will suffer the effects of larger classes, less

faculty attention, and less choice of electives. It has also brought about the near absence of personal diagnosis and assistance for remedial students (many of whom are from our minority communities) and the absence of writing training in preparation for 1A.

111 -- That Delta is below average in its variety of course offerings in English (see Enclosure 8).

It appears, then, on the basis of this study, that the suspicions of the English faculty have grounds in fact: in significant ways Delta's English program does not measure up to the average--much less the best--of those in eight neighboring junior colleges.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

Our primary purpose was to obtain significant comparative data to enable us to evaluate our English program. We feel this objective was acheived.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

English 73 should be thoroughly reorganized as a pre-1A writing class. The large class English 73 experiment should be abandoned or supplemented by small class experiences (possibly in laboratories). English 73 should emphasize the writing process with a great deal of interaction between teacher and student.

The nature and goals of English 74 should also be thoroughly examined and, if necessary, revised. We now feel the course should be either terminal or remedial--not both. Its role clarified, the course could then be improved and efficiently directed to its primary function. The authors of this report feel that within the framework of our present curriculum, English 74 should be a terminal course with an emphasis on practical writing problems.

The following basic solutions to an apparent inequality of opportunity in English for the Delta student are implied by our findings:

1) Significantly lower the average class size in writing courses.

2) Increase the English staff to bring its proportion to the total faculty to a par with other colleges.

3) Increase the number of course offerings.

To achieve these objectives as quickly and effectively as possible, the English faculty should be allowed six units of released time in the Fall of 1968 to study our present program, to clarify the nature and content of the courses, and, when necessary, to develop new course outlines--all with the involvement of the whole English faculty.

Enclosure 1

This series of questions is meant to serve as a working basis for an examination of the English programs offered in other junior colleges.

A. General Information

1. What are the total hours of instructional time devoted to the English curriculum (proportional to total enrollment)?

2. What is the total number of full-time (15 credit hours) equivalent teachers on the English faculty (proportional to enrollment)?

3. What is the variety of English courses offered?

4. What is the role of the English faculty in determining curriculum, materials, policy?

5. What are the English requirements for the A. A. Degree?

B. Writing Classes (1a, 1b, 74, 44 and equiv.)

1. Curriculum

a. What classes are offered?
b. What are the goals and writing content?
c. What are the prerequisites for 1a and the terminal writing courses--and what are the testing methods used for placement?
d. Are there any advanced (beyond 1a-1b) writing programs offered?
e. What evaluation procedures of current programs are used?

2. Teaching Conditions

a. What is an instructors normal load of writing classes?
b. Is there any credit-hour compensation for the burden of theme grading (eg., 4 for 3, or the like)?
c. What is the maximum original enrollment (cards cut) in writing classes?
d. Is there any reader assistance--system, rates of pay, total allotment?
e. Is there any faculty criticism of these programs?

C. Terminal-Remedial Program

1. Curriculum

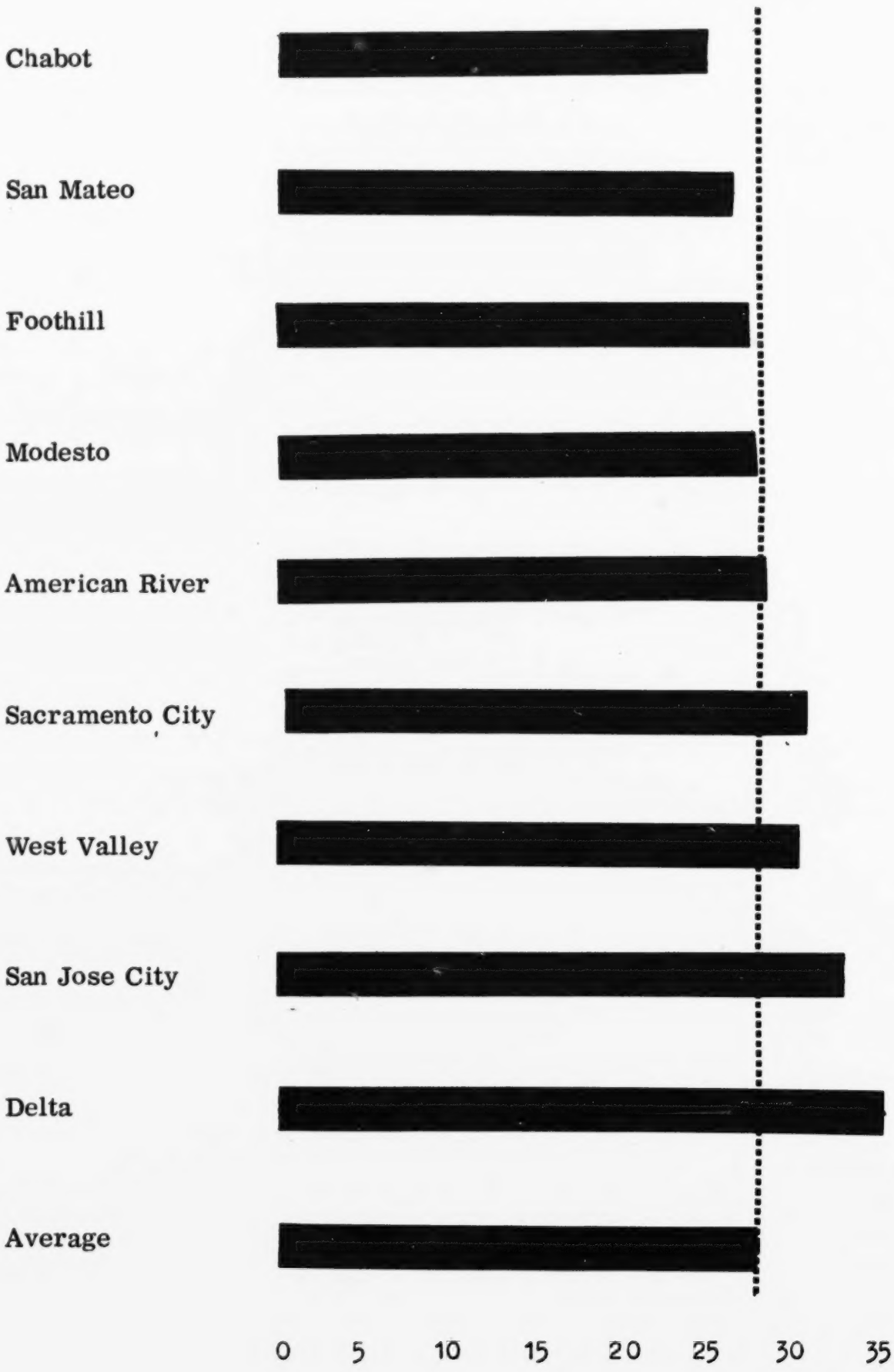
a. Is a distinction made between remedial and terminal courses?
b. What are the titles, content, prerequisites, and goals of remedial and terminal courses?
c. What diagnostic and classifying methods are used?
d. Is there any use of large enrollment courses? (size, goals, success in faculty opinion, history, how initiated)
e. Is there any use of laboratories? (skills taught, organization, equipment, success in faculty opinion, history)
f. Is there a foreign student program and how does it correlate with the rest of the program?
g. What is the nature of the reading program? (remedial, developmental, laboratory)

2. Teaching Conditions

a. What is the maximum enrollment of remedial and terminal classes?
b. What methods are used to staff laboratories? (credits allotted, assistance, etc.)
c. What is the maximum enrollment of large classes (if used)?
d. Is there any reader assistance--system, rates of pay, total allotment?
e. Is there any faculty criticism of these programs?

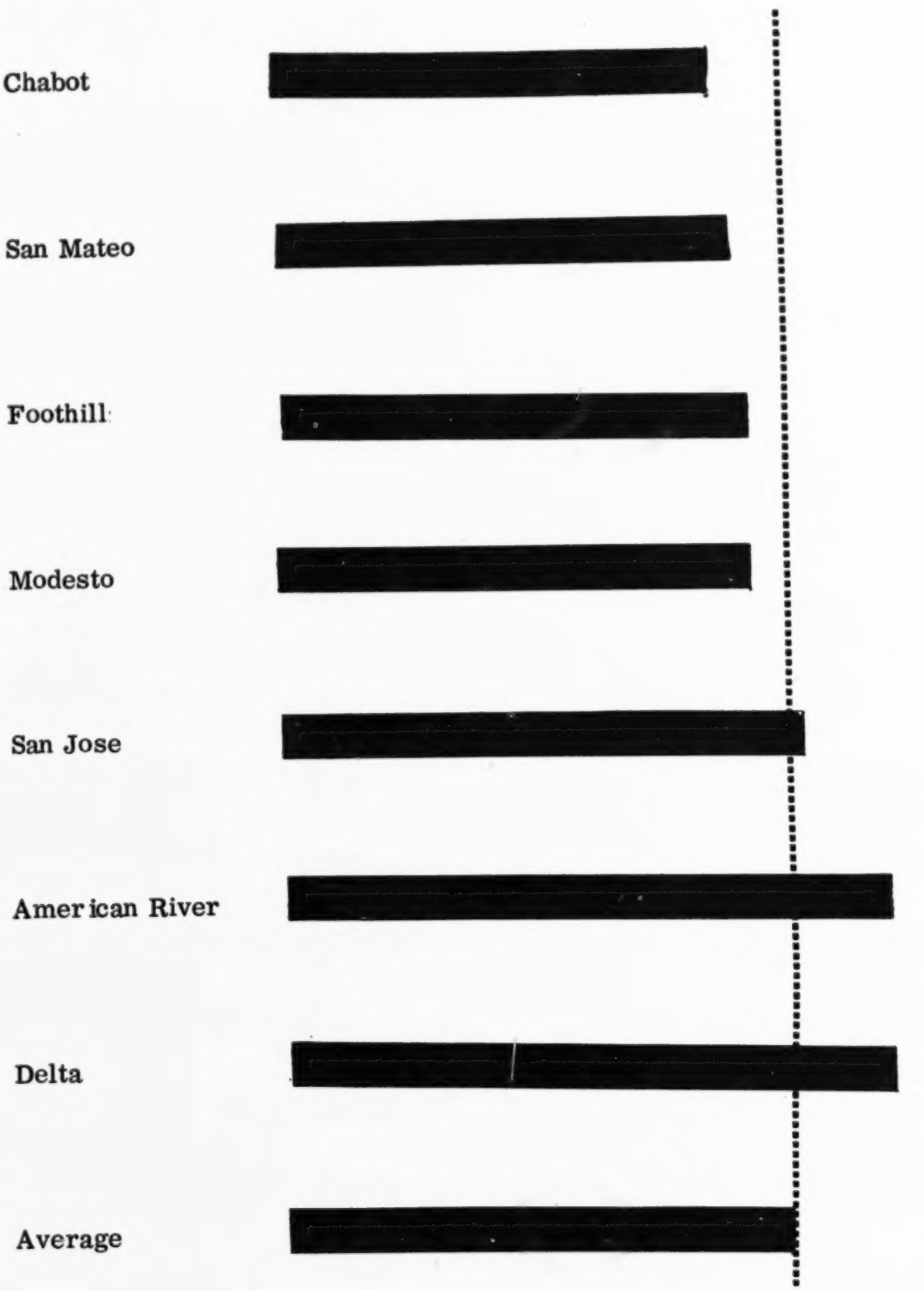
Enclosure 2

MAXIMUM INITIAL ENROLLMENT IN ENGLISH 1a
(Per Class)



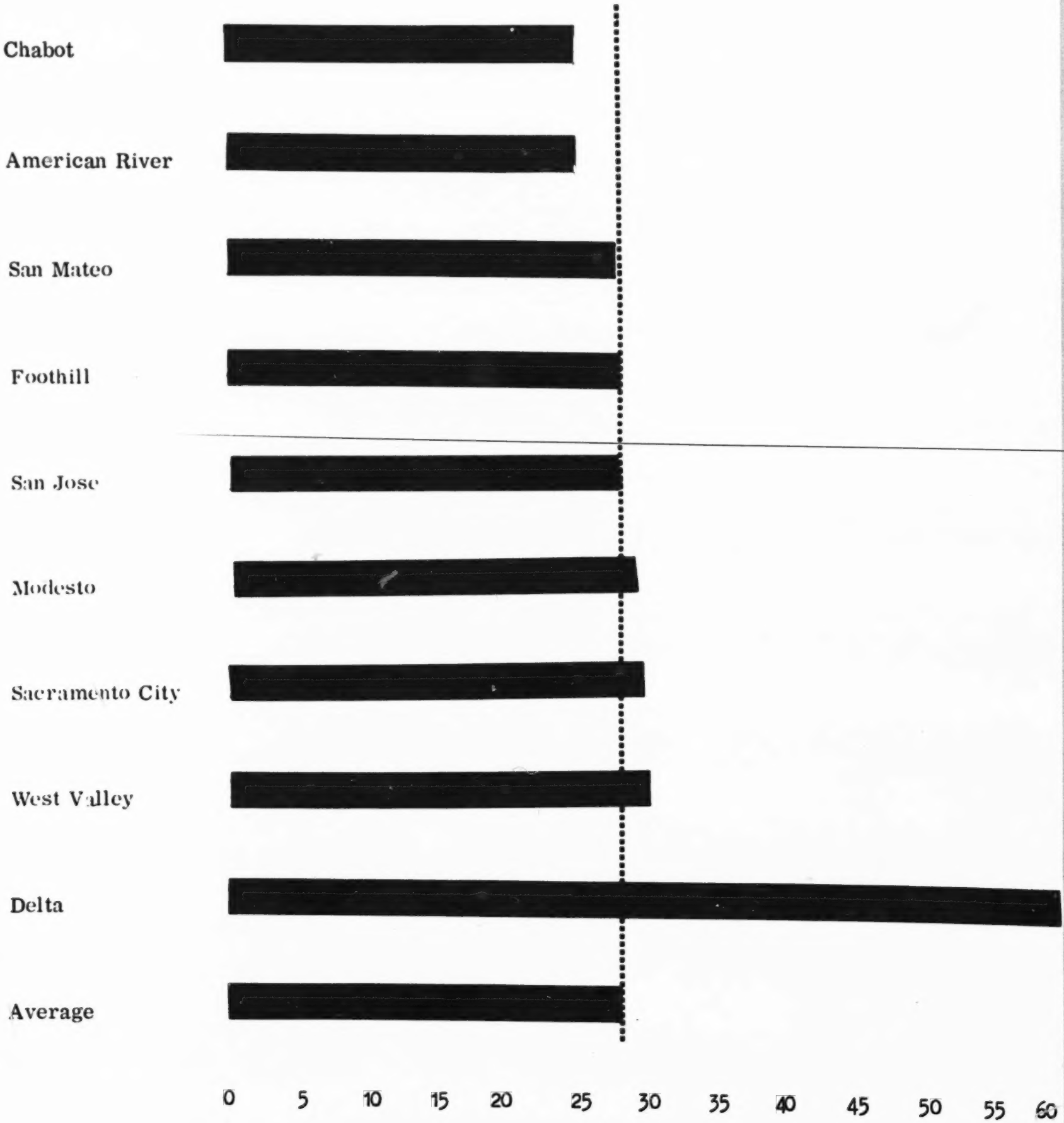
Enclosure 3

MAXIMUM INITIAL ENROLLMENT IN ENGLISH 1b
(Per Class)



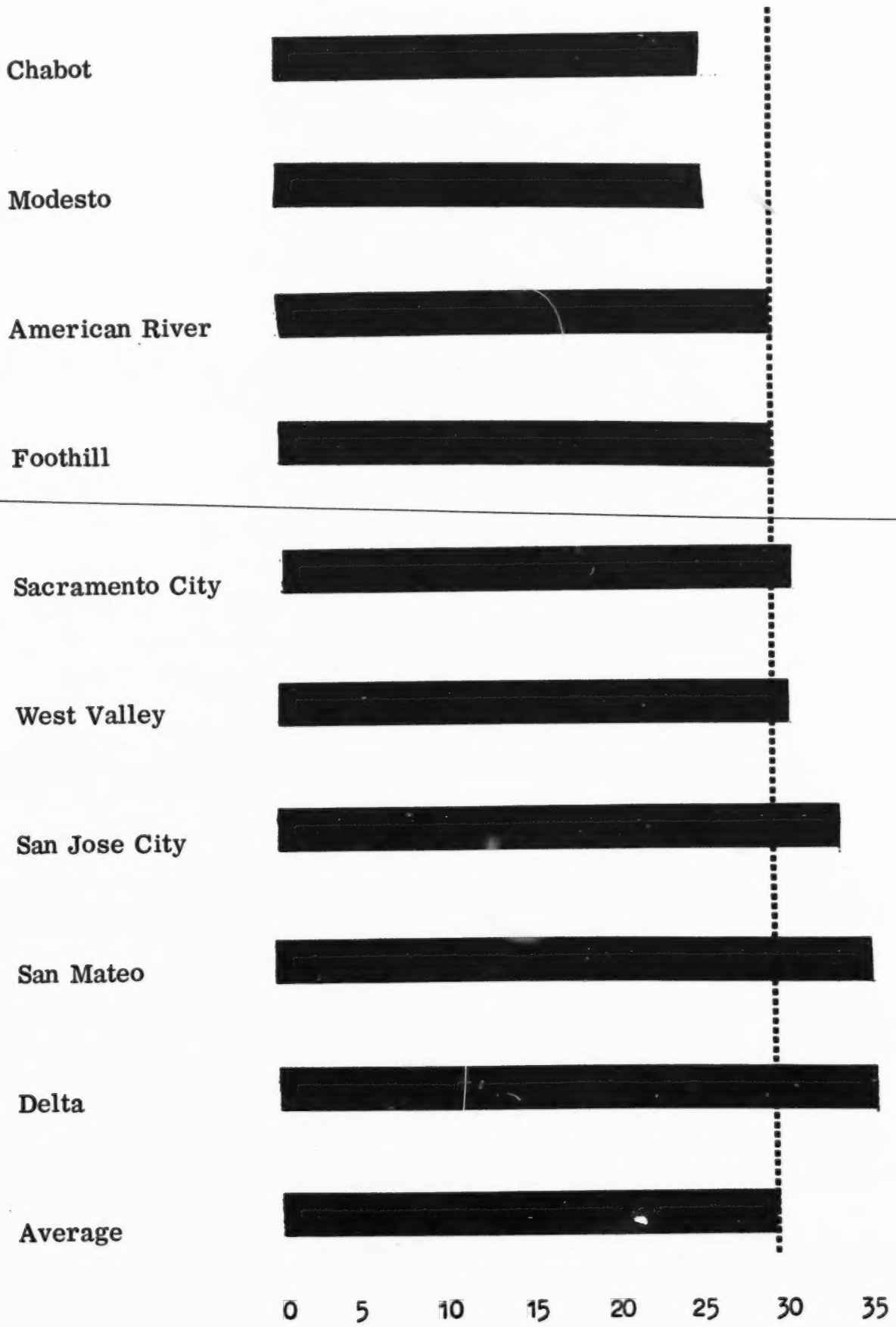
Enclosure 4

MAXIMUM INITIAL ENROLLMENT IN ENGLISH #73 OR EQUIVALENT
(Per Class)



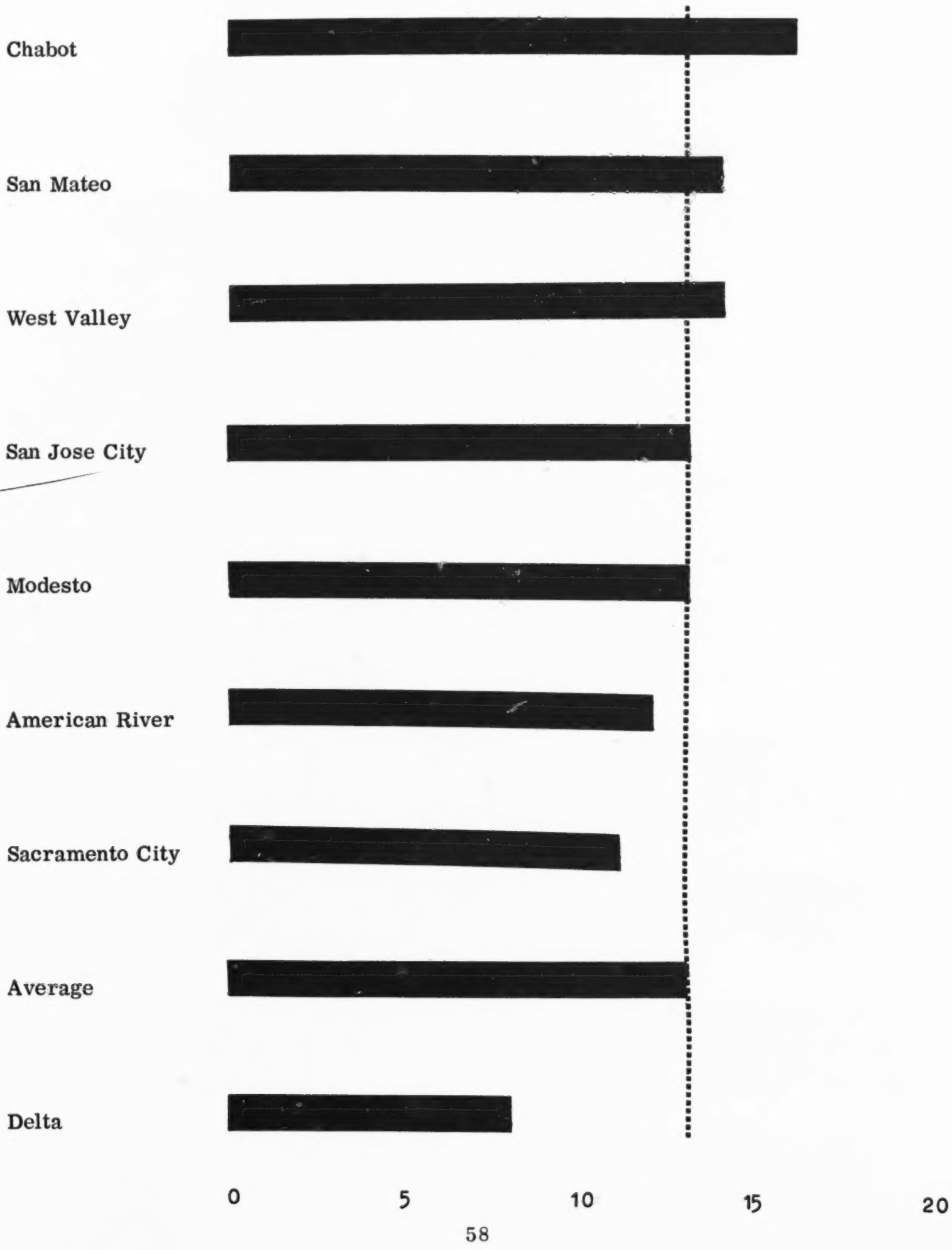
Enclosure 5

MAXIMUM INITIAL ENROLLMENT IN ENGLISH #74 OR EQUIVALENT
(Per Class)



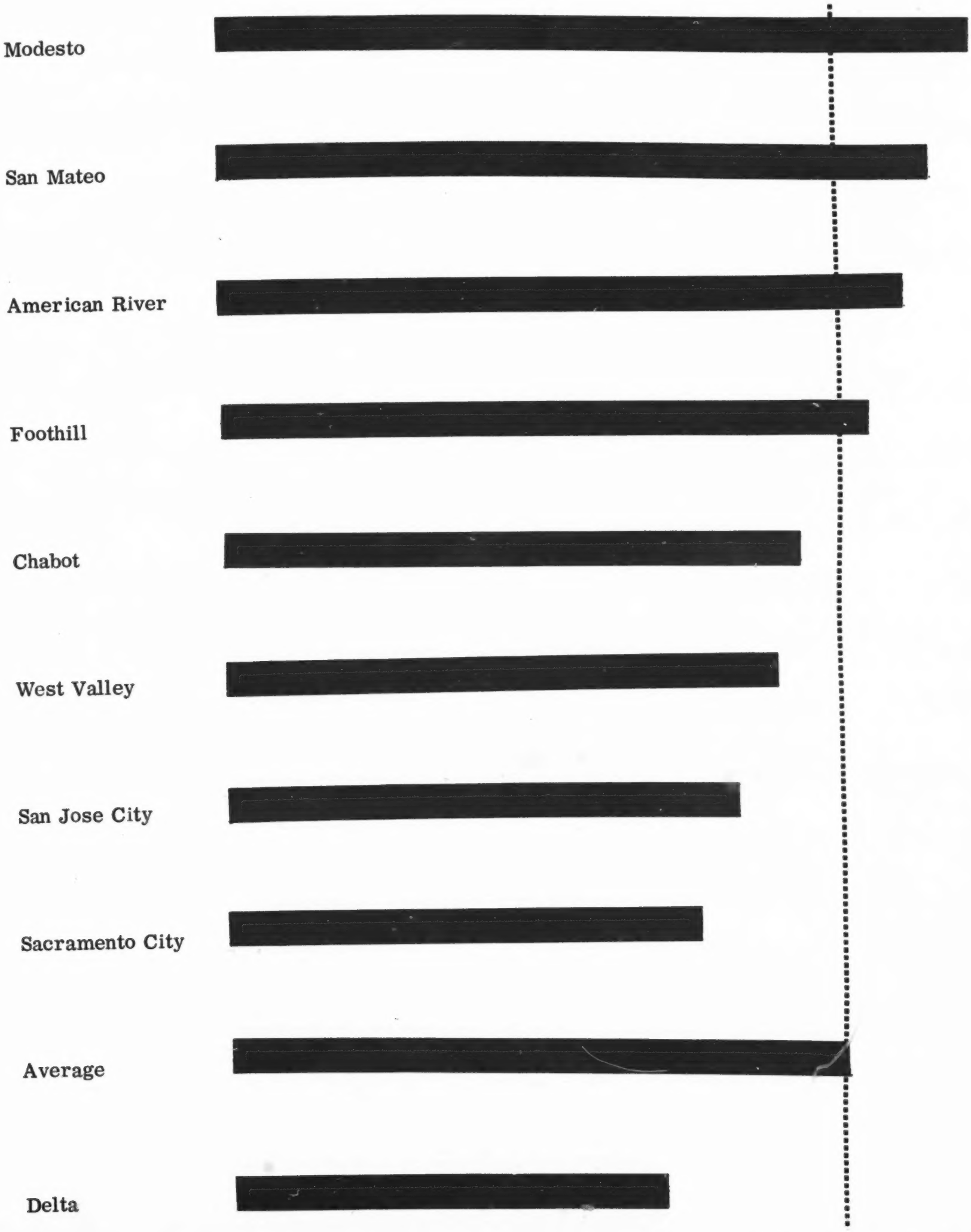
Enclosure 6

ENGLISH FACULTY AS % OF WHOLE FACULTY



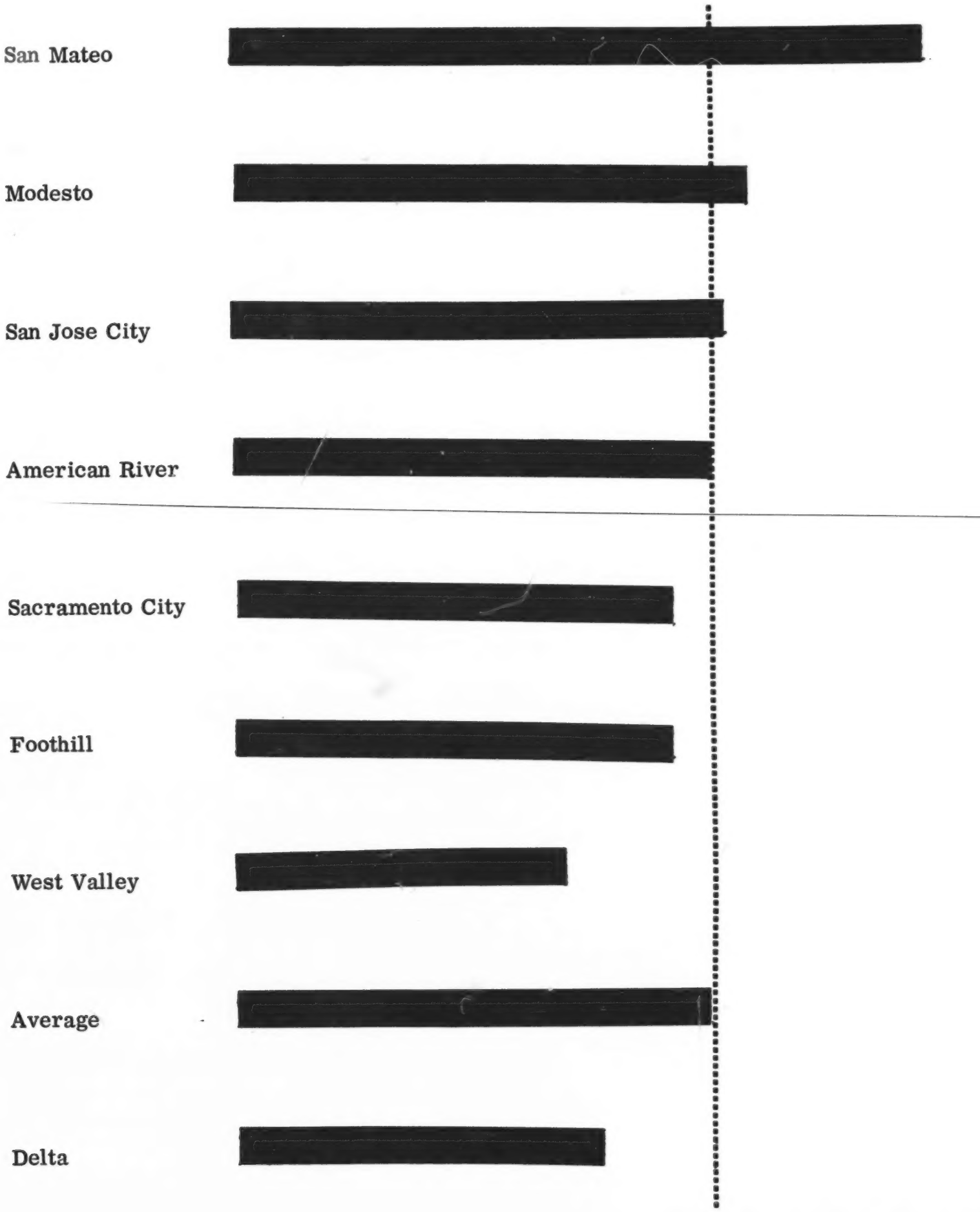
Enclosure 7

NUMBER OF ENGLISH FACULTY PER 1, 000 STUDENTS



Enclosure 8

NUMBER OF COURSE OFFERINGS IN ENGLISH



SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: March 7, 1968

From: Elizabeth A. Prescott

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Development of Curriculum for The Teaching of Review of Arithmetic - Math 72

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. The primary objective of this project was to develop a course of study for the teaching of basic arithmetic to a large class, using a programmed text.

2. The major assumption was that the high drop-out rate in such classes as first year algebra and Basic Technical Math was due to the unsatisfactory background in basic arithmetic and number concepts.

3. By presenting the concepts in an entirely different manner, that of programmed texts, it might be possible to improve the skills of the students and convince them that they can succeed where they have always before failed.

Describe the general method used in the development and completion of the project.

This investigator enjoyed the task of surveying the literature dealing with programmed learning and teaching machines. It is a pleasure to feel more secure in background knowledge dealing with this theory of learning. The survey ranged from material about learning theories from which programmed learning developed, to types of programmed learning and ways of presenting the material.

After picking by title and description programmed texts that sounded as though they might be applicable for this course, letters were written to the publishers requesting a copy of their text for examination.

Upon receiving the texts, they were surveyed for the type of programming and clarity of presentation. After careful consideration, an analysis of the two preferred by this investigator were presented to the math department for final decision.

A new catalog listing was prepared, the course itself planned in conjunction with the math department. Evaluation procedures were also constructed.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

The Math Department made final selection of the text, A First Program in Mathematics, by Arthur Heywood. This text is an excellent combination of branching and linear programming. After using the linear method to present a topic, questions are asked which will branch the student back for review or send him ahead onto a new topic. Pre-testing allows a student to pick his own program.

The new catalog listing reflected decisions on the type of students and units to be assigned. The Math Department advised that only students receiving a stanine of five or less on the quantitative part of the S. C. A. T. be allowed to enroll in the course. They also recommended that one unit of non-transferable credit be given for two, one-hour periods a week.

The instructor's guide which accompanies the text will be followed by the instructor. This provides for diagnostic testing, which determines the student's own program. The text also provides tests for grading purposes at the end of each unit, and a final test.

Testing will be done at the beginning of each class period. Since the scoring will be done by computer, it should be possible to provide for means to note the growth of each student and spot those who need special attention.

Since the class is taught in a large class situation, with lectures and testing, office hours will be provided for individual help. Clerical help will be available for recording grades, attendance and other duties.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

Since the course has been set up, a text adopted, and the class actually is now in operation, the major objective of the project has been achieved. It has not been possible to test completely the validity of the basic assumption that the programmed approach will help greatly the students selected for the course. However, the mechanism for such a test has been built into the course: The Advanced Arithmetic Test, Stanford Arithmetic Test Series, written by Terman, et al will be given as a pre-test, at the middle of the semester, and at the completion of the course. It is hoped that those students who are still on campus next year may be retested to check retention of the material.

Condensed by: Richard F. Bullard
Research Assistant

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: May 31, 1968

From: Lawrence E. Schneider

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Certificate Programs in Technical and Vocational Education

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To fulfill a need for the Vocational Education student who for one reason or another could not attain the requirements for an A. A. Degree.

2. To give this student a recognized standard of proficiency for employment purposes.

3. To initiate a better Vocational Education program for the student who does not acquire an A. A. Degree.

4. To give the counselors a better course of study guide for students to pursue in completing a definite curriculum requirement for employment.

5. The program allows a student to continue to meet the requirements of an A. A. Degree.

Describe the general method used in the development and completion of the project:

Administrative personnel, teachers, counselors, students and prospective employers were interviewed. Their remarks and suggestions were carefully studied. Each individual course was carefully studied and adapted for this special program.

After consulting with the above, preparations were made to include the courses that were considered most apropos for the certificate to be earned.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

After many hours of course evaluation and many interviews, it was determined that a certificate program would be essential to fill the void for those students who because of time, funds, and other obligations were unable to pursue an A. A. Degree program.

It was also determined that in order for preparation to this end to be complete, large blocks of courses would be required in some cases more than is ordinarily needed for a major in an A. A. Degree program.

Because of the demands of employment in various technologies, more skills and technology is needed for job entry levels.

The results of the study were a definite verification of the great need for programs to establish a Trade Proficiency Standard recognized by the industrial community.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The objectives of the study have been achieved. We now have fourteen certificate programs ready for recommendation by the Trade Advisory Committees, the Curriculum Council, the Administrative Council, the Administration and approval by the Board of Trustees. Outline of these programs is attached as Appendix "A".

Recommendation: As a result of your conclusions, what further action should be taken in the future. Be specific.

The certificates being proposed, embrace a series of courses of study. There is, however, a need for certificates which would identify short term courses which would assist persons in reading, mathematics, or other technical skills for upgrading purposes.

It is suggested that the Curriculum Council recommend the certificate programs as proposed, be adopted by the college. The need for a Trade Proficiency Standard in all occupations in which our students are being prepared for employment is urgent and will receive support from the Industrial Community, but we must exert the leadership in developing same.

CERTIFICATE PROGRAMS IN TECHNICAL AND VOCATIONAL EDUCATION

DEINITION OF A CERTIFICATE PROGRAM: A specifically defined group of courses selected to meet a specific occupational goal.

PURPOSE OF A CERTIFICATE PROGRAM: To provide a certificate, issued as evidence of satisfactory completion of a specialized program of study. Employers and appropriate joint apprentice committees will recognize certificates in satisfaction of self-improvement requirements for employment or promotion. Each certificate will carry the signature of the President of the Board of Trustees, District Superintendent-President, and the Chairman of the appropriate Trade Advisory Committee.

STRUCTURE OF A CERTIFICATE PROGRAM: Each program consists of courses specifically selected to fulfill the purpose of the certificate.

REQUIREMENTS TO EARN A CERTIFICATE: Each course in the program or its substitute must be completed with a grade of C or better. (A "D" grade may be accepted by transfer. Twelve units must be completed at San Joaquin Delta College. Application must be made at the Registrar's Office for the awarding of the Certificate.

RELATIONSHIP TO THE A. A. DEGREE PROGRAM: The length of time needed to complete the requirements of a certificate will depend upon prior training and on the type of certificate being earned. The certificate can be earned without earning the Associate in Arts Degree. The student is encouraged, however, to complete the A. A. Degree requirements, choose elective courses to broaden his interests, and earn his college degree. The student who chooses to earn his A. A. Degree may fulfill the major area of study requirement with a certificate program.

TYPES OF CERTIFICATES

AUTOMOTIVE TECHNOLOGY
Auto Mechanics
Auto Body Repair
Small Engines

ELECTRICAL TECHNOLOGY
Electricity
Electronics

PRINTING TECHNOLOGY
Printing

CONSTRUCTION TECHNOLOGY
Heating & Air Conditioning
Carpentry
Mill Cabinet
Painting
Construction Technology

MECHANICAL TECHNOLOGY
Mechanical Technology
Welding Technology
Industrial Maintenance

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 5, 1968

From: H. Schutz, A. Trujillo

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Preparation of single concept learning aids for use in Chemistry 1a.

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To prepare aids that would deal with concepts that had given difficulty to past students.

2. To photograph meaningful demonstrations, beyond the time available in the laboratory or the manipulative skill of the student.

3. Assumed certain of these concepts giving trouble to students, could be broken down into individual steps that could be mastered by a diligent student of average ability.

4. The second assumption was that the past poor performance in certain areas was due in part to the methods of presentation in lectures and textbooks. He may have been busy taking notes, but intellectually he was not fully involved.

5. The final assumption was that we would be wasting our resources by producing materials known to be available from audio-visual vendors.

Describe the general method used in the development and completion of the project.

Because of the common difficulty experienced by a high percentage of students, the lack of commercially available material, and logical stepwise procedure involved, the balancing of oxidation-reduction equations (Redox) was chosen.

It was planned first to do this with 8 mm single concept cartridge films. Time and motion studies changed this first to a film strip and then production difficulties changed it to a carousel of 35 mm slides. A Redox I consisting of some 40 black and white slides fitted to a carousel projector for use in a carrel in the library was produced. These slides proceed in typical programmed sequences of giving examples, defining rules and asking questions. In general, each slide first answers the questions from the preceeding slide and then asks questions. Redox I gradually proceeds from the most elementary and fundamental Redox concepts to equations of moderate difficulty.

Working through this set of slides, the student has a complete set of detailed notes, giving correctly balanced equations. This is identical to that which he would have had in a one-to-one situation with an instructor. The time to complete this set will vary from one to several hours, depending upon the background and learning rate of the student.

A second carousel, Redox II, consisting of 50 slides was produced. These provide a brief review, a condensing of rules, and proceeds from moderately difficult equations to some of real challenge.

Six sets of Redox I and Redox II are available.

Due to limitations in time and certain production difficulties, only one motion picture was made. It is about eight minutes long and covers three demonstrations on disproportions. Disproportion is not especially difficult; neither is it a self-evident truth. It is covered early in Redox II. The reactions chosen use reagents familiar to the students, the reactions are colorful, and they supplement rather than duplicate the material in Redox II.

With our limited ventilation, it takes about three days for the mucous membrane linings of the nose and throat to recover from the products produced in the above reactions. For this reason, we sometimes omit this valuable demonstration from our lecture work.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

Due to the time required to survey the market, obtain lettering for the slides, and students from the Photography Workshop class to do the photographing, less material was produced than originally anticipated. Also, the material was not generally ready at the appropriate time.

Individual students have tried the Redox I and II and are pleased with it. They have volunteered statements that agree with original assumptions. At their suggestion, several changes were made in the wording of questions and answers on the slides.

We shall have full use of these materials in the fall of 1968. It will then be possible to be specific regarding the level of performance on tests compared with earlier groups not using such materials.

Increased interest in film technique led to an application and award of a grant in chemical film-making at Stanford this summer for Dr. Trujillo.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The objectives of the study seem to have been met, but evaluation of the use of the new teaching aids will have to be continued next semester.

In addition, an on-going process of production of teaching aids seems to have been started: As this report is being written, finishing touches are being placed on a second film, and a third is in the initial planning stages, in preparation for completion at the Stanford AC3 workshop in chemical film-making.

Recommendation: As a result of your conclusions, what further action should be taken in the future? Be specific.

If the Fall 1968 Chemistry 1a classes show an improvement in understanding redox as a result of the two slide sets, we shall recommend that teaching aids for other specific areas be prepared.

Evaluation of the films must still be made, but success is expected in their use, and the production of other films in chemistry is here recommended. This would require college expenditure for films, filming and lighting equipment, and processing, and such expenditure is also being recommended.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 2, 1968

From: Mr. Smyth, Mr. Bush

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Community Laboratory

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To provide on-the-job experience so that students in Sociology can apply principles learned in Sociology 1A and 1B. (Social organization, culture, stratification, primary groups, collective behavior.)

2. To develop attitudes and appreciations, particularly in regards to various social problems. (Poverty, crime, mental illness, handicapped.)

3. To improve communication between the college and various cooperating community agencies.

4. To provide opportunities for students to explore future vocational choices.

5. To show the variety of human relations experiences with which one must deal.

Describe the general method used in the development and completion of the project.

Students may elect to work in one of five cooperating social agencies; California Youth Authority, Mental Hospital, Community Action Council, or

the handicapped. They may also observe the Social Welfare worker and the Police department in action. Some specific examples of the work involved are the following: Tutoring culturally deprived children, helping in the geriatric wards in the mental hospital, serving as aids to counselors and teachers at the California Youth Center, and participating in the work of the Neighborhood Centers. Students are given an orientation before they assume any duties, they have meetings during the on-the-job experience, and take part in post-project evaluation sessions. A student may earn one or two unit credits for the course based on 48 hours for each unit. (18 hours on campus and the remainder with the institution of their choice.)

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

1. Some 100 students gave about 4, 000 hours of community service in five programs.

2. A survey of student evaluations indicates a genuine satisfaction with the program.

3. The only major problem not completely anticipated was the factor of transportation. Since some agencies are about 18 miles from the college, the factor of time and cost for some students proved to be prohibitive.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

1. Application of principles - Students wrote on brief papers giving examples of how culture and socialization were demonstrated in actual practice.

2. Developing attitudes and appreciation - While difficult to measure, the following factors indicate that this objective was met:

   (a) A number of students have volunteered to continue to work this summer.
   (b) Reports from cooperating agencies indicate a positive change in the attitudes of students.
   (c) Each student wrote a final paper. Most indicated that they felt a growing awareness of various social problems.

3. Representatives from the cooperating institutions visited the college and participated in programs for orientation and evaluation. The institutions have heartily endorsed the program and all wish to continue, hopefully with an even larger program, next year.

4. Several students have indicated that due to their experiences in the lab they will now pursue a career in social service.

5. Students who worked in the California Youth Authority and the mental hospital learned:

   (a) how to cope with institutional procedure, and
   (b) how to interact with staff and other personnel.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

1. Bus service should be provided for students, particularly those operating at considerable distances from the college.

2. The office of those in charge of the program should contain a telephone so that communication with various agencies might be improved.

3. While the sociology lab should not be required for all those who take sociology, it should be a strongly recommended supporting elective. Every effort should be made to have the counselors implement the above.

4. The program should be greatly expanded and broadened. Possible avenues for future development might include:

   (a) Cooperating with high school classes in social studies to develop similar programs.
   (b) Expanding into other subject areas, for example, psychology.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: May 20, 1968

From: W. W. Steyer

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: Certificate Programs in Business

The following report should be limited to approximately 1, 000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to make to proceed.)

1. To establish the merit of the certificate idea.

2. To formulate the parameters of a program which would recognize achievement in specialized occupational areas of business training.

3. To identify specific areas of concentration and develop the curriculum content for each area.

4. To coordinate the implementation of the certificate program.

Describe the general method used in the development and completion of the project:

The general approach to the development of the certificate program was to involve as many of the individuals and agencies as feasible who would be participators in and users of the program when finally implememted. Therefore, the idea was presented in group meetings and individual interviews to several representatives of business and business education. Approximately 15 to 20 such discussion sessions were held, and the ideas evolving from them were incorporated into the final draft of the program. Representative groups and individuals contacted were: Business Division Faculty; San Joaquin Delta College Counselors; San Joaquin Delta College Curriculum Committee; State Department of Employment; Education Committee of

Administrative Management Society; private employment agencies; high school business education coordinators (SUSD); San Joaquin Secretaries Association, high school business education teachers, counselors, and students.

Completion of the project involved processing the program through official college administrative channels and providing communication for implementation of the program.

A coding scheme was designed to be used in conjunction with the student's information file in order to identify the students specific occupation-training goal (certificate). The procedure for making application for a certificate and the issuance of a certificate were developed. Catalog copy was written and submitted, and a brochure designed for production.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

The idea and ten certificate programs in business were officially adopted and included as a part of the total college program.

Evaluation & Recommendation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

The initial objective of developing the program has been achieved. Building the reputation and acceptance of the program and expansion of the program must be a continuing project. Through the development of the program and the initial phases of disseminating the information about the program, the idea has been received favorably and enthusiastically by everyone contacted. Certificate programs should prove to be a valuable inclusion in our total college program.

SAN JOAQUIN DELTA COLLEGE
STOCKTON, CALIFORNIA
HIGHER EDUCATION ACT, 1965
(TITLE III)
"PROJECT REPORT"

Date: June 4, 1968

From: John Walker

To: J. L. Blanchard, Assistant Superintendent-Vice President

Project Title: A Problem Approach to Political Science 70A

The following report should be limited to approximately 1,000 words.

What were the objectives of the project? (Be specific and include any major assumptions you had to made to proceed.)

1. The basic objective was concerned with the writing of a series of problems which can be used in a Problems in American Government course.

2. There was also an examination of the present course offerings in the area of Political Science.

3. Students enrolled in this course do so to fulfill a requirement for an A. A. Degree. They have experienced little success in previous courses involving academic subjects.

4. The students, for the most part, have limited interest and ability in coping with large amounts of reading, but can be motivated by involving them in verbal and visual activities.

5. The students are interested in those problems which directly affect them on a personal basis. They dislike abstract presentations. This will also be the last course in government and politics they take before leaving school.

Describe the general method used in the development and completion of the projcet.

What is attempted is the presentation of a contemporary political problem to the student. Hopefully this is a problem which is of some concern to him. The student, after discussion and background information will be asked to provide a proposed solution to the problem. He may also be asked to defend his solution in class. The emphasis is on verbal activity with a minimum of required reading.

An additional aspect of this approach is the de-emphasis of government structure and function. Most students and many instructors find this very dull. Most students in spite of repeated exposure in high school have not learned the most fundamental aspects of government structure and functions--and have no desire to learn unless these have some relevance to their everyday life. Hopefully, in the process of examining the problems facing the society, knowledge of structure and function will be acquired in a manner which will give the student the essentials without causing a reaction on the part of the student.

Since Problems in American Government is a two-unit course meeting one hour twice a week, there are approximately thirty-four class sessions. Obviously neither student nor instructor can possibly deal with a different problem at each class meeting. In order to provide background, time for discussion, and proposed solutions, one problem paper has been provided for every three sessions.

In the first session the problem is presented to the student with a reading which illustrates the problem. In this initial session the instructor should draw out the various implications of the situation and influences which are likely to affect the situation. If background is needed, this should be provided by the instructor. The student should be prepared to take a position on the issue.

At the second session the problem and its implications are explored through discussion. The effect of this situation on the student should be stressed. The various institutions and processes which might affect the situation should be explored.

The third session is devoted to exploring possible solutions. Again the emphasis should be upon actions that are possible for the average citizen, but "far out" solutions should be proposed and considered.

This technique can be supplemented with tapes, readings and work with governmental agencies to enable the student to gain a wider understanding of the particular problem.

What were the results of the study? What specific things were discovered? Did they support or contradict any major assumptions made?

With this technique, the instructor can get a very clear picture of the students' abilities and problems without examinations. I feel this is particularly desirable since these students often do poorly on written examinations owing to their lack of academic ability. A process similar to "Project Socrates" or an audio-tutorial system could be used to provide basic information and supplemental information.

Evidence indicates that the Political Science 70 student does rather well in classes of twenty to thirty where he can speak out. It is recommended that a physical setting similar to that provided in the seminar portion of the forum program be provided for this problems approach. A formal classroom tends to inhibit discussion.

Evaluation: Have the objectives of the study been achieved? If so, how? If not, what could be done in the future to achieve them?

Although the project will not be entirely completed until mid-July, a number of problems have been completed and used, with great success, in this class in the latter part of the spring semester. A complete evaluation cannot be made until the entire problems book is employed over a semester.

Recommendations: As a result of your conclusions, what further action should be taken in the future? Be specific.

In examining the Political Science 70 program there is evidence of a need for additional course offerings for the students who are potential college transfers. At the preset time, if a student initially decides to work in a non-transfer program, he must take Political Science 70A-B. If he later decides to work toward transfer to a state college, he must then take Political Science I.

The use of test scores to qualify for transfer courses often forces the student, even when he intends to transfer, to take 70A-B and Political

Science I. The students who are faced with this situation are often far superior to most of the students who enroll in Problems in American Government, but are not qualified for Political Science I.

What is needed is a program for these students of moderate ability. This is being done in the Psychology and Sociology departments at the present time with their courses numbered in the thirties.

There are two courses which could be added to meet the needs of the students of middle ability--Contemporary Political Problems and History of the United States since 1945. These could be designed in such a way as to satisfy the various requirements for instruction in government while providing a program which would be rigorous enough to approach a transfer course. Hopefully, these courses would be of great interest to the students since they would deal with events and problems well within their experience. A tentative course outline has been completed.